

## ABSTRACT

An implant device for cartilage regeneration in loading-bearing regions uses the osteochondral defect model. The implant is formed of resorbable polymeric materials. The implant is designed such that load is transmitted from the articulating surface of the bone platform through the implant to the entire area of subchondral bone of the bone platform. Application of load in this manner results in reduced subchondral bone resorption, leading to joint stabilization and maintenance of normal joint biomechanics. The implant allows for the incorporation therein of a resorbable scaffold or matrix material. The present implant solves the current inability to regenerate cartilage in load-bearing articulating surfaces using engineered scaffold devices.